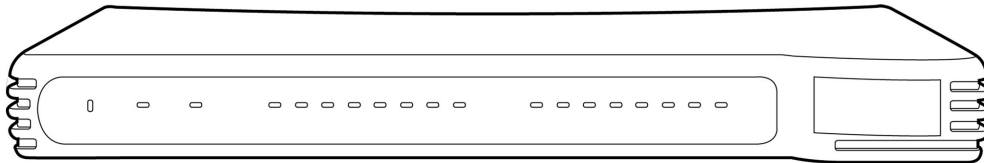


Overview



Models

HP 1900-8G Switch

JD865A

Key features

- Network access security
- Out-of-the-box setup when defaults are accepted
- Enhanced intuitive management options
- Quality of service (QoS)
- Fanless design for quiet operation

Product overview

The HP 1900-8G Switch delivers entry-level Layer 2 Gigabit Ethernet switching solutions in a compact and quiet desktop enclosure that is customized and priced for small and midsize organizations. Without sacrificing the functionality normally required on managed networks, this managed switch offers tremendous value to small and medium businesses that need a level of control over their network not offered by unmanaged switching products—but also require a low-cost solution. The 1900-8G switch helps build a voice-ready network with QoS, RADIUS authentication, and other features. The switch has seven 10/100/1000 ports and a dual-purpose Gigabit Ethernet port (configurable as 10/100/1000 copper or SFP-based fiber) to connect to high-performance computers, servers, or network backbones. To provide improved use of network bandwidth and outstanding voice and data quality, businesses can direct traffic flow according to their needs.

Overview

Features and benefits

Management

- **RADIUS accounting support:** separates RADIUS accounting server support per SSID; provides detailed session, usage, and billing information for each client activity
- **Enhanced browser-based interface:** allows even the most novice users to configure the switch during initial setup and monitor it during normal operation

Performance

- **Half-/Full-duplex auto-negotiating capability on every port:** doubles the throughput of every port
- **VLANs:** segment the network by grouping users based on their data or traffic exchange requirements; help ensure improved use of available bandwidth as traffic flow is directed according to the needs of the business
- **Advanced QoS and traffic shaping:** traffic prioritization, using IEEE 802.1p Quality of Service (QoS) and Type of Service (TOS) with Differentiated Services Code Point (DSCP), helps ensure that critical time-sensitive traffic like voice is given the priority needed for quality communications
- **Rapid Spanning Tree Protocol support:** improves network compatibility, scalability, and availability
- **Flexible Gigabit Ethernet uplink**
multiple units can be daisy chained together via the built-in copper Gigabit Ethernet uplink port or be connected to a network backbone via SFP-based fiber modules.
- **IGMP snooping:** multicast filtering improves network performance, instead of flooding traffic to all ports

Resiliency and high availability

- **IEEE 802.1D Spanning Tree Protocol (STP):** provides redundant links while preventing network loops
- **Link aggregation (trunking):** allows any number of ports to be grouped together automatically using Link Aggregation Control Protocol (LACP), or grouped manually, to form an ultra-high-bandwidth connection to the network backbone; helps prevent traffic bottlenecks

Security

- **IEEE 802.1X and RADIUS network login:** control port-based access for authentication and accountability

Warranty and support

- **NEW 3-year warranty**
with advance replacement and next-business-day delivery (available in most countries)
- **NEW Electronic and telephone support**
limited electronic and telephone support is available from HP; to reach our support centers, refer to www.hp.com/networking/contact-support; for details on the duration of support provided with your product purchase, refer to www.hp.com/networking/warrantysummary
- **NEW Software releases**
to find software for your product, refer to www.hp.com/networking/support; for details on the software releases available with your product purchase, refer to www.hp.com/networking/warrantysummary

Technical Specifications

HP 1900-8G Switch (JD865A)

Ports	7 RJ-45 auto-negotiating 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T) 1 SFP dual-personality 10/100/1000 port (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T) Supports a maximum of 8 autosensing 10/100/1000 ports	
Physical characteristics	Dimensions	8.08(w) x 5.33(d) x 1.36(h) in (20.52 x 13.54 x 3.45 cm)
	Weight	1.76 lb (0.8 kg)
Memory and processor	Processor	Vitesse VSC7398 @ 25 MHz, 128 KB SDRAM, 2 MB flash
Performance	100 Mb Latency	< 5 µs
	1000 Mb Latency	< 5 µs
	Throughput	11.3 million pps
	Routing/Switching capacity	16 Gbps
	MAC address table size	8192 entries
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	10% to 90%, non-condensing
	Non-operating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non-operating/Storage relative humidity	10% to 95%, non-condensing
Electrical characteristics	Voltage	100-240 VAC
	Frequency	50/60 Hz
Safety	UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03	
Emissions	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000, 61000-3-3; ICES-003 Class A	
Management	IMC - Intelligent Management Center; limited command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB	
Notes	7 GbE ports can be operated in combination; only the eighth can be used with the SFP port. The HP 1900-8G (JD865A) Switch was formerly sold as the 3Com OfficeConnect Managed Gigabit Switch 8 (3CGSU08A) and may ship with this product labeling.	
Services	3-year, 4-hour onsite, 13x5 coverage for hardware (UV786E)	
	3-year, 4-hour onsite, 24x7 coverage for hardware (UW485E)	
	3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UW488E)	
	3-year, 24x7 SW phone support, software updates (UV789E)	
	1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (HR682E)	
	1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR683E)	
	1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (HR684E)	
	Installation with minimum configuration, system-based pricing (UW451E)	
	Installation with minimum configuration, system-based pricing (UY901E)	
	Installation with HP-provided configuration, system-based pricing (UY902E)	
	4-year, 4-hour onsite, 13x5 coverage for hardware (UV787E)	

Technical Specifications

4-year, 4-hour onsite, 24x7 coverage for hardware (UW486E)
4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW489E)
4-year, 24x7 SW phone support, software updates (UV790E)
5-year, 4-hour onsite, 13x5 coverage for hardware (UV788E)
5-year, 4-hour onsite, 24x7 coverage for hardware (UW487E)
5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW490E)
5-year, 24x7 SW phone support, software updates (UV791E)
3 Yr 6 hr Call-to-Repair Onsite (UW491E)
4 Yr 6 hr Call-to-Repair Onsite (UW492E)
5 Yr 6 hr Call-to-Repair Onsite (UW493E)
1-year, 6 hour Call-To-Repair Onsite for hardware (HR686E)
1-year, 24x7 software phone support, software updates (HR685E)

Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

Standards and protocols **Device management**

RFC 2819 RMON

General protocols

IEEE 802.1w Rapid Reconfiguration of Spanning Tree
IEEE 802.3ab 1000BASE-T
IEEE 802.3ad Link Aggregation Control Protocol (LACP)
IEEE 802.3i 10BASE-T
IEEE 802.3x Flow Control
IEEE 802.3z 1000BASE-X

MIBs

RFC 1213 MIB II
RFC 2021 RMONv2 MIB

Network management

IEEE 802.1D (STP)
RFC 1215 SNMP Generic traps

QoS/Cos

IEEE 802.1P (CoS)

Security

IEEE 802.1X Port Based Network Access Control

Accessories

HP 1900-8G Switch
accessories

Transceivers	
HP X120 1G SFP LC LX Transceiver	JD119B
HP X124 1G SFP LC SX Transceiver	JD493A
Cables	
HP .5m Multi-mode OM3 LC/LC Optical Cable	AJ833A
HP 1m Multi-mode OM3 LC/LC Optical Cable	AJ834A
HP 2m Multi-mode OM3 LC/LC Optical Cable	AJ835A
HP 5m Multi-mode OM3 LC/LC Optical Cable	AJ836A
HP 15m Multi-mode OM3 LC/LC Optical Cable	AJ837A
HP 30m Multi-mode OM3 LC/LC Optical Cable	AJ838A
HP 50m Multi-mode OM3 LC/LC Optical Cable	AJ839A

Accessory Product Details

NOTE: Details are not available for all accessories. The following specifications were available at the time of publication.

HP X120 1G SFP LC LX Transceiver (JD119B) A small form-factor pluggable (SFP) Gigabit LX transceiver that provides a full duplex Gigabit solution up to 550m on MMF or 10Km on SMF	Ports	1 SFP 1000BASE-LX port (IEEE 802.3z Type 1000BASE-LX)	
	Connectivity	Connector type	LC
	Physical characteristics	Wavelength	1300 nm
		Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)
		Full configuration weight	0.04 lb. (0.02 kg)
	Electrical characteristics	Power consumption typical	0.8 W
	Cabling	Power consumption maximum	1.0 W
		Cable type:	Either single mode or multimode;
		Maximum distance:	<ul style="list-style-type: none">• 550m for Multimode• 10km for Singlemode
	Services	Fiber type	Both
Refer to the HP website at: www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.			

HP X124 1G SFP LC SX Transceiver (JD493A) JD493A HP X124 1G SFP LC SX Transceiver that provides a full duplex Gigabit solution up to 550m on Multi Mode fiber.	Ports	1 LC 1000BASE-SX port	
	Connectivity	Connector type	LC
	Physical characteristics	Wavelength	850 nm
		Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)
		Full configuration weight	0.04 lb. (0.02 kg)
	Electrical characteristics	Power consumption typical	0.8 W
		Power consumption maximum	1 W
		Cabling	Maximum distance: • 220m-550m
	Services	Fiber type	Multi Mode
		Refer to the HP website at: www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.	

Accessory Product Details

HP 0.5 m Multimode OM3 Cabling
LC/LC Optical Cable
(AJ833A)

Notes

Cable type:

50/125 μm (core/cladding) diameter, multimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m

Maximum distance:

10Gbps Transfer Rate (Ethernet): 300m

Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 μm fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions: Core diameter: $50 \pm 3.0\mu\text{m}$ Cladding diameter: $125 \pm 2.0\mu\text{m}$ Coating diameter: $245 \pm 10\mu\text{m}$
- Optical glass: Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.
- Optical glass: Bandwidth: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links.
- CABLE: The cable is duplex zipcord graded index 50/125 μm multimode optical fiber and designed to work in both the 850 and 1300 nm wavelength windows.
- BULK CABLE & CABLE ASSEMBLY CONFIGURATION:
- Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.
- Jacket Color: Aqua for OM3 multimode per TIA 598
- Boot Color: White
- Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters.
- Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.
- Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg

Services

Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

Accessory Product Details

**HP 1 m Multimode OM3
LC/LC Optical Cable**
(AJ834A)

Cabling

Cable type:

50/125 μ m (core/cladding) diameter, multimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m

Maximum distance:

10Gbps Transfer Rate (Ethernet): 300m

Notes

Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 μ m fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions: Core diameter: $50 \pm 3.0\mu$ m Cladding diameter: $125 \pm 2.0\mu$ m Coating diameter: $245 \pm 10\mu$ m
- Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.
- Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links.
- CABLE: The cable is duplex zipcord graded index 50/125 μ m multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows.
- BULK CABLE & CABLE ASSEMBLY CONFIGURATION:
- Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.
- Jacket Color: Aqua for OM3 multimode per TIA 598
- Boot Color: White
- Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters.
- Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.
- Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg

Services

Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

Accessory Product Details

**HP 2 m Multimode OM3
LC/LC Optical Cable**
(AJ835A)

Cabling

Notes

Services

Cable type:

50/125 µm (core/cladding) diameter, multimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m;

Maximum distance:

10Gbps Transfer Rate (Ethernet): 300m

Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 µm fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions: Core diameter: $50 \pm 3.0\mu\text{m}$ Cladding diameter: $125 \pm 2.0\mu\text{m}$ Coating diameter: $245 \pm 10\mu\text{m}$
- Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.
- Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links.
- CABLE: The cable is duplex zipcord graded index 50/125µm multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows.
- BULK CABLE & CABLE ASSEMBLY CONFIGURATION:
- Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.
- Jacket Color: Aqua for OM3 multimode per TIA 598
- Boot Color: White
- Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters.
- Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.
- Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg

Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

Accessory Product Details

**HP 5 m Multimode OM3
LC/LC Optical Cable**
(AJ836A)

Cabling

Cable type:

50/125 µm core/cladding) diameter, multimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m;

Maximum distance:

10Gbps Transfer Rate (Ethernet): 300m

Notes

Cable Specs: This specification defines the detail requirements for a tight buffered duplex fiber optic multimode OM3 50/125 µm fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions: Core diameter: $50 \pm 3.0\mu\text{m}$ Cladding diameter: $125 \pm 2.0\mu\text{m}$ Coating diameter: $245 \pm 10\mu\text{m}$
- Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.
- Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links.
- CABLE: The cable is duplex zipcord graded index 50/125µm multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows.
- BULK CABLE & CABLE ASSEMBLY CONFIGURATION:
- Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.
- Jacket Color: Aqua for OM3 multimode per TIA 598
- Boot Color: White
- Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters.
- Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.
- Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg

Services

Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

Accessory Product Details

HP 15 m Multimode OM3 Cabling
LC/LC Optical Cable
(AJ837A)

Notes

Cable type:

50/125 μ m (core/cladding) diameter, multimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m;

Maximum distance:

10Gbps Transfer Rate (Ethernet): 300m

Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 μ m fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions: Core diameter: $50 \pm 3.0\mu$ m Cladding diameter: $125 \pm 2.0\mu$ m Coating diameter: $245 \pm 10\mu$ m
- Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.
- Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links.
- CABLE: The cable is duplex zipcord graded index 50/125 μ m multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows.
- BULK CABLE & CABLE ASSEMBLY CONFIGURATION:
- Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.
- Jacket Color: Aqua for OM3 multimode per TIA 598
- Boot Color: White
- Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters.
- Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.
- Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg

Services

Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

Accessory Product Details

HP 30 m Multimode OM3 Cabling
LC/LC Optical Cable
 (AJ838A)

Notes

Cable type:

50/125 µm (core/cladding) diameter, multimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m;

Maximum distance:

10Gbps Transfer Rate (Ethernet): 300m

Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 µm fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions: Core diameter: $50 \pm 3.0\mu\text{m}$ Cladding diameter: $125 \pm 2.0\mu\text{m}$ Coating diameter: $245 \pm 10\mu\text{m}$
- Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.
- Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links.
- CABLE: The cable is duplex zipcord graded index 50/125µm multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows.
- BULK CABLE & CABLE ASSEMBLY CONFIGURATION:
- Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.
- Jacket Color: Aqua for OM3 multimode per TIA 598
- Boot Color: White
- Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters.
- Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.
- Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg

Services

Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

Accessory Product Details

HP 50 m Multimode OM3 Cabling
LC/LC Optical Cable
(AJ839A)

Cable type:

50/125 µm (core/cladding) diameter, multimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m;

Maximum distance:

10Gbps Transfer Rate (Ethernet): 300m

Notes

Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions: Core diameter: $50 \pm 3.0\mu\text{m}$ Cladding diameter: $125 \pm 2.0\mu\text{m}$ Coating diameter: $245 \pm 10\mu\text{m}$
- Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.
- Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links.
- CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows.
- BULK CABLE & CABLE ASSEMBLY CONFIGURATION:
- Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.
- Jacket Color: Aqua for OM3 multimode per TIA 598
- Boot Color: White
- Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters.
- Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.
- Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg

Services

Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

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